# DETAILED ACTION

## Response to Amendment

* This action is responsive to amendment dated 07/11/2011.

* Applicant's amendments filed on 07/11/2011 has been entered and considered.

* Claims 1, 2 and 6, are amended.

* Claims 7,18-28 are canceled

* Claims 1-6, and 8-17 are pending.

* Claims 1-6, and 8-17 stand rejected.

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection.  Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114.  Applicant's submission filed on 07/11/2011 has been entered.

## Claim Rejections - 35 USC § 103

4.       The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole

would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.      The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

    1.    Determining the scope and contents of the prior art.
    2.    Ascertaining the differences between the prior art and the claims at issue.
    3.    Resolving the level of ordinary skill in the pertinent art.
    4.    Considering objective evidence present in the application indicating obviousness or nonobviousness.

6.    Claims 1-6 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Park to**

**(WO02/098063 A1)**, in view of Stracke to ( US 6047330)

**Regarding claim 1**, Park teaches  method for receiving a multicast transmission in user devices

in a network, the method comprising:

receiving, by an intermediate device, a request from a first user device to join a multicast

group(**fig.6 box S615 , REQUEST TO JOIN MULTICAST GROUP)** ;

identifying multicast data packets associated with said multicast group(**FIG.7 BOX S701 ,**

**REQUEST TO SEARCH ROUTER ADDRESS)** ; monitoring transmissions of said multicast

data packets from said intermediate device, by said first user device, to determine whether said

identified multicast data packets are being transmitted between said intermediate device and a

second user device in an already established unicast session between said second user device and

said intermediate device(**FIG.7 BOX S703 COMMAND TO TRANSMIT DATA , BOX S705**

**TRANSMIT DATA**) ;

capturing said multicast data packets by said ~~second~~ first user device, if said second user device

is in said already established unicast session between said second user device and said

intermediate device(**FIG. 7 BOX S 709 ESTABLISH PATH THROUGH DYNAMIC**

**TUNNELING OR JOINING MULTICAT GROUP**) ;

Park does not explicitly teach establishing a unicast session between said first user device and

said intermediate device and switching to normal mode and processing multicast data packets by

said first user device, if one of a) said second user device is not in said already established

unicast session and b) said  first user device is no longer in a coverage area for receiving

transmissions between said second user device and said intermediate device

However, Stracke teaches  establishing a unicast session between said first user device and said

intermediate device and switching to normal mode and processing multicast data packets by said

first user device, if one of a) said second user device is not in said already established unicast

session and b) said  first user device is no longer in a coverage area for receiving transmissions

between said second user device and said intermediate device(**abstract  discloses Any routers**

**that pick up the packets wait for a random amount of time and after the waiting period, if**

**a router does not hear from any of the other routers that a connection was made, it**

**establishes a connection with the new router. Ping messages are periodically sent between**

**the routers that have established connections between themselves, testing the connection**

**between the routers**)

Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention was made to enable the system of Park establishing a unicast session between said first user device and said intermediate device and switching to normal mode and processing multicast data packets by said first user device, if one of a) said second user device is not in said already established unicast session and b) said first user device is no longer in a coverage area for receiving transmissions between said second user device and said intermediate device, as suggested by Stracke. This modification would benefit the system to create an efficient routing system through the network .

**Regarding claim 2**, The combination of Park and Stracke teaches The method according to claim 1, further comprising: testing to determine if said second user device is still active; and performing one of continuing to receive multicast data packets via one of said established unicast session and selecting a third user device by said intermediate device with which said intermediate device establishes a new unicast session(Stracke ,**abstract discloses Any routers that pick up the packets wait for a random amount of time and after the waiting period, if a router does not hear from any of the other routers that a** connection **was made, it establishes a connection with the new router. Ping messages are periodically sent between the routers that have established connections between themselves, testing the connection between the routers**).

**Regarding claim 3**, Park teaches The method according to claim 1, wherein said transmission of multicast data packets occurs in one of a wireless local area network, a cable network and a 3G cellular network that supports broadcast services(**page 12, lines 4-5 discloses ADSL network** ).

**Regarding claim 4**, The combination of Park and Stracke teaches The method according to

claim 1, wherein all user devices in said multicast group operate in monitor mode except said

user device that is active in said unicast session, said user device that is active in said unicast

session operates in normal mode (Stracke **,abstract discloses Any routers that pick up the**

**packets wait for a random amount of time and after the waiting period, if a router does not**

**hear from any of the other routers that a** connection **was made, it establishes a connection**

**with the new router. Ping messages are periodically sent between the routers that have**

**established connections between themselves, testing the connection between the routers).**

**Regarding claim 5,** Park teaches The method according to claim 1, wherein said request to join

said multicast group is made via an Internet group management protocol request(**Page 17, lines**

**33-35 discloses IGMP SNOOPING).**

**Regarding claim 6,** Park teaches establishing a unicast session between an intermediate device

and a dedicated terminal(**FIG. 7 BOX S 709 ESTABLISH PATH THROUGH DYNAMIC**

**TUNNELING OR JOINING MULTICAT GROUP)** ;

identifying multicast data packets associated with a multicast group(**FIG.7 BOX S701 ,**

**REQUEST TO SEARCH ROUTER ADDRESS)**;

monitoring transmissions of said multicast data packets between said intermediate device and

said dedicated terminal by user devices(**FIG.7 BOX S703 COMMAND TO TRANSMIT**

**DATA , BOX S705 TRANSMIT DATA)**;

processing said multicast data packets by said dedicated terminal(**FIG.7 BOX S703**

**COMMAND TO TRANSMIT DATA , BOX S705 TRANSMIT DATA)**

Park does not explicitly teach testing to determine if a wake-up message is received from said dedicated terminal; if said wake-up message is received, continuing to receive multicast data packets via said already established unicast session, and if said wake-up message is not received, selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session;

However, Stracke teaches  testing to determine if a wake-up message is received from said dedicated terminal; if said wake-up message is received, continuing to receive multicast data packets via said already established unicast session, and if said wake-up message is not received, selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session **(abstract  discloses Any routers that pick up the packets wait for a random amount of time and after the waiting period, if a router does not hear from any of the other routers that a connection was made, it establishes a connection with the new router. Ping messages are periodically sent between the routers that have established connections between themselves, testing the connection between the routers)** Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention was made to enable the system of Park testing to determine if a wake-up message is received from said dedicated terminal; if said wake-up message is received, continuing to receive multicast data packets via said already established unicast session, and if said wake-up message is not received, selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session, as suggested by Stracke. This modification would benefit the system to create an efficient routing system through the network .

**Regarding claim 8,** Park teaches The method according to claim 6, wherein said transmission of

multicast/broadcast data packets occurs in one of a wireless local area network, a cable network

and a 3G cellular network that supports broadcast services(**page 12, lines 4-5 discloses ADSL**

**network** ).

**Regarding claim 9,** The combination of Park and Stracke teaches The method according to

claim 6, wherein all user devices in said multicast group operate in monitor mode and said

dedicated terminal operates in normal mode (Stracke **,abstract  discloses Any routers that pick**

**up the packets wait for a random amount of time and after the waiting period, if a router**

**does not hear from any of the other routers that a connection was made, it establishes a**

**connection with the new router. Ping messages are periodically sent between the routers**

**that have established connections between themselves, testing the connection between the**

**routers**).

**Regarding claim 10,**  Park teaches  The method according to claim 6, wherein a plurality of

unicast sessions are established in order to support multiple transmission rates(**fig.6 discloses**

**plurality of multicast routers**).

**Regarding claim 11**, Park teaches The method according to claim 10, wherein said plurality of

unicast sessions are between said intermediate device and a plurality of dedicated terminals(**fig.6**

**discloses plurality of dedicated terminals**) .

**Regarding claim 12**, Park teaches The method according to claim 6, wherein said intermediate

device is one of an access point, a bridge, a router and a brouter (**fig.6 discloses routers**).

**Regarding claim 13**, Park teaches means for receiving, by said intermediate device, a request

from a first user device to join a multicast group(**fig.6 box S615 , REQUEST TO JOIN**

**MULTICAST GROUP**);

means for identifying multicast data packets associated with said multicast group(**FIG.7 BOX**

**S701 , REQUEST TO SEARCH ROUTER ADDRESS**);

means for monitoring transmissions of said multicast data packets from said intermediate device

by said first user device to determine whether said identified multicast data packets are being

transmitted between said intermediate device and a second user device in an already established

unicast session between said second user device and said intermediate device(**FIG.7 BOX S703**

**COMMAND TO TRANSMIT DATA , BOX S705 TRANSMIT DATA**);

means for processing said multicast data packets by said second user device, if said second user

device is in said already established unicast session between said second user device and said

intermediate device(**FIG. 7 BOX S 709 ESTABLISH PATH THROUGH DYNAMIC**

**TUNNELING OR JOINING MULTICAT GROUP**) ;


Park does not explicitly teach means for establishing a unicast session between said first user

device and said intermediate device and switching to normal mode and processing multicast data

packets by said first user device, if one of a) said second user device is not in said already

established unicast session and b) said first user device is no longer in a coverage area for

receiving transmissions between said second user device and said intermediate device.

However, Stracke teaches  means for establishing a unicast session between said first user device

and said intermediate device and switching to normal mode and processing multicast data

packets by said first user device, if one of a) said second user device is not in said already

established unicast session and b) said first user device is no longer in a coverage area for

receiving transmissions between said second user device and said intermediate device.

**(abstract discloses Any routers that pick up the packets wait for a random amount of time**

**and after the waiting period, if a router does not hear from any of the other routers that a**

**connection was made, it establishes a connection with the new router. Ping messages are**

**periodically sent between the routers that have established connections between**

**themselves, testing the connection between the routers)**

Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention

was made to enable the system of Park means for establishing a unicast session between said first

user device and said intermediate device and switching to normal mode and processing multicast

data packets by said first user device, if one of a) said second user device is not in said already

established unicast session and b) said first user device is no longer in a coverage area for

receiving transmissions between said second user device and said intermediate device, as

suggested by Stracke. This modification would benefit the system to create an efficient routing

system through the network .

**Regarding claim 14,** The combination of Park and Stracke teaches The apparatus according to

claim 13, further comprising: means for testing to determine if said second user device is still

active;

and means for performing one of a) continuing to receive multicast data packets via said

established unicast session and b) selecting another user device by said intermediate device with

which said intermediate device establishes a new unicast session(Stracke **,abstract discloses**

**Any routers that pick up the packets wait for a random amount of time and after the**

**waiting period, if a router does not hear from any of the other routers that a connection was made, it establishes a connection with the new router. Ping messages are periodically sent between the routers that have established connections between themselves, testing the connection between the routers).**

**Regarding claim 15**, Park teaches  The apparatus according to claim 13, wherein said transmission of multicast data packets occurs in one of a wireless local area network, a cable network and a 3G cellular network that supports broadcast services**(page 12, lines 4-5 discloses ADSL network** ).

**Regarding claim 16**, The combination of Park and Stracke teaches The apparatus according to claim 13, wherein all user devices in said multicast group operate in monitor mode except said user device that is active in said unicast session, said user device that is active in said unicast session operates in normal mode(Stracke **,abstract  discloses Any routers that pick up the packets wait for a random amount of time and after the waiting period, if a router does not hear from any of the other routers that a connection was made, it establishes a connection with the new router. Ping messages are periodically sent between the routers that have established connections between themselves, testing the connection between the routers).**

**Regarding claim 17**, Park teaches The apparatus according to claim 13, wherein said request to join said multicast group is made via an Internet group management protocol request**(Page 17, lines 33-35 discloses IGMP SNOOPING).**

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## Response to Arguments

Applicant's arguments have been considered but are moot in view of new ground of rejection(s).

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 1-571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B./

Examiner, Art Unit 2461

/Huy D Vu/

Supervisory Patent Examiner, Art Unit 2461